ABSTRACT

A Layer-2.5 virtual private network arrangement and method is disclosed for switched Layer2VPN combined with a subset of Layer-3VPNs. The switched virtual circuit Layer-2 VPN includes logical ports of two types, customer and provider, and port information tables, and uses Layer-3 mechanisms to distribute customer routes. This provides simplified provisioning and a degree of customer autonomy regarding establishing of virtual connections without the assistance of the service provider across the service provider's network while allowing the provider to distribute customer reachability information. The switched virtual circuit Layer-2.5VPN using Layer-3 mechanisms is particularly useful for customers who are not comfortable with a full Layer-3 VPN IP datapath due to special security concerns or a desire for Layer-2 QoS with benefits of an IP-VPN service.